

Name _____

Date _____

291 Review of Enrichment and Linear Programming

Complete p. 132 #s 9-14 in the space provided.

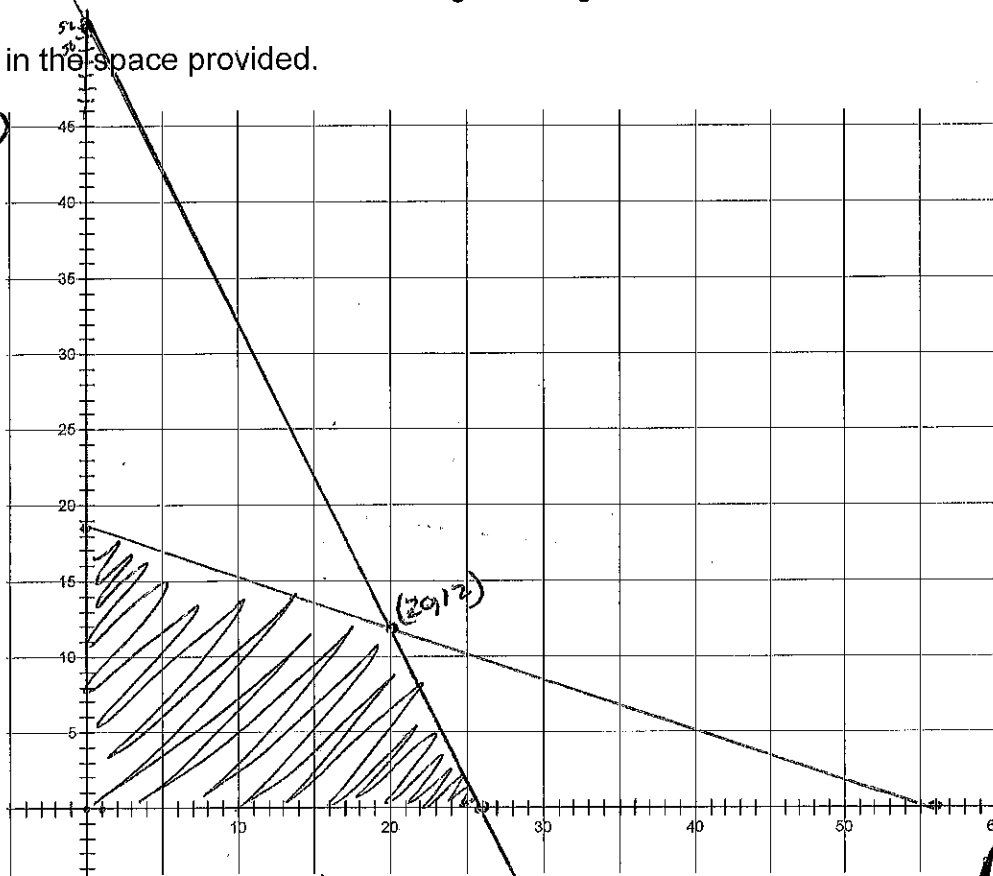
Canvas Bag A	Canvas 4yd	Leather 1yd
Leather Bag B	2yd	3yd

$$\begin{aligned} (0, 52) & 4A + 2B \leq 104 \\ (26, 0) & A + 3B \leq 56 \\ (0, 18\frac{2}{3}) & A + 3B \leq 56 \\ (56, 0) & \end{aligned}$$

$$A \geq 0$$

$$B \geq 0$$

	$P = 20A + 35B$
0, 0	\$0
0, $18\frac{2}{3}$	\$653.33
26, 0	\$520
20, 12	$400 + 420 = \$820$



$$\begin{array}{r} 35 \\ 12 \\ \hline 70 \\ 35 \\ \hline 420 \end{array}$$

$$\begin{aligned} 4A + 2B &= 104 \\ -4A - 12B &= -224 \\ \hline -10B &= -120 \\ B &= 12 \end{aligned}$$

$$\begin{aligned} 104 \\ -24 \\ \hline 4A &= 80 \\ A &= 20 \end{aligned}$$

Find the formula for the nth term of the given patterns. Do work on the back of **A = 20** this sheet.

1. -3, 2, 7, 12, ...

$$t_n = 5n - 8$$

2. 5, 16, 35, 62, 97, ...

$$t_n = 4n^2 - n + 2$$

3. 11, 19, 7, -43, -149, -329, ...

$$t_n = -3n^3 + 8n^2 + 5n + 1$$

work on
other
pg

①

$$a + b = -3$$

$$2a + b = 2$$

$$a = 5 \quad b = -8$$

$$t_n = 5n - 8$$

②

$$a + b + c = 5$$

$$3a + b = 11$$

$$2a = 8$$

$$4a + 2b + c = 16$$

$$5a + b = 19$$

$$9a + 3b + c = 35$$

$$a = 4$$

$$b = -1$$

$$c = 2$$

③

$$t_n = an^3 + bn^2 + cn + d$$

$$a + b + c + d = 11$$

$$7a + 3b + c = 8$$

$$8a + 4b + 2c + d = 19$$

$$19a + 5b + c = -12$$

$$27a + 9b + 3c + d = 7$$

$$37a + 7b + c = -50$$

$$64a + 16b + 4c + d = -43$$

$$6a = -18$$

$$a = -3$$

$$b = 8$$

$$c = 5$$

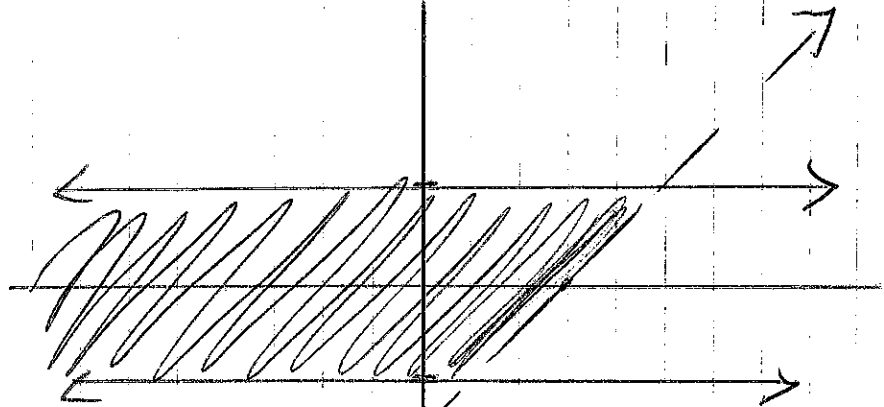
$$d = 1$$

p126

15. $y > x - 3$

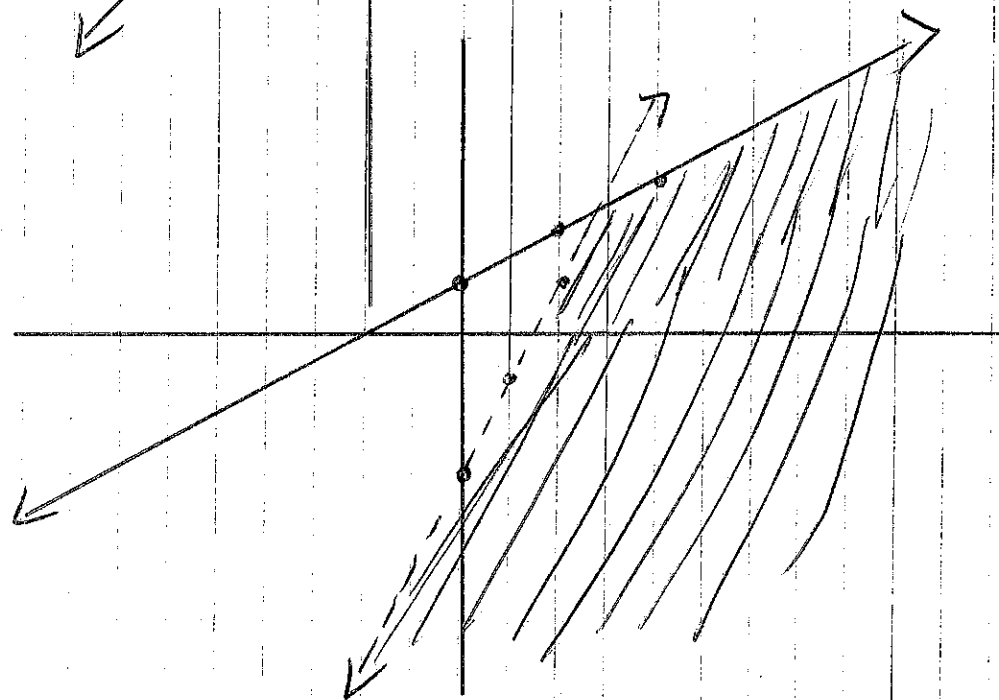
$|y| \leq 2$

$y \leq 2$ AND $y \geq -2$



18. $y < 2x - 3$

$y \leq \frac{1}{2}x + 1$



21. $|x+1| \leq 3$

$x + 3y \geq 6$

$3y \geq -x + 6$

$y \geq -\frac{1}{3}x + 2$

$x+1 \leq 3$ AND $x+1 \geq -3$
 $x \leq 2$ $x \geq -4$

